



Subject card

Subject name and code	Introduction to Design and Engineering Graphics, PG_00053770						
Field of study	Engineering Management						
Date of commencement of studies	October 2020	Academic year of realisation of subject			2020/2021		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			e-learning		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Krzysztof Redlarski					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	30.0	0.0	0.0	60
	E-learning hours included: 60.0						
	Adresy na platformie eNauczanie: PODSTAWY PROJEKTOWANIA I GRAFIKA INŻYNIERSKA - Moodle ID: 7730 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=7730						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM		
	Number of study hours	60	0.0	0.0	60		
Subject objectives	The student knows the basics of design methodology, has the ability to apply in design works, is able to independently make basic technical drawings and read them correctly.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_U06] uses basic theoretical knowledge to solve selected organizational problems, design technical solutions and manage projects, including engineering projects	The student knows the drawing standards			[SU4] Assessment of ability to use methods and tools		
	[K6_W05] knows the statistical and IT methods and tools that enable the acquisition and presentation of data on the organisation's resources, including technical resources	The student knows the basics of design methodology.			[SW1] Assessment of factual knowledge		
Subject contents	<p>LECTURE Presentation of design theory. The importance of proper design in the work of an engineer and designer. Formulation of design problem. Design process. Silhouette designer. Creative thinking.</p> <p>DESIGN EXERCISES Implementation of handwritten drawings. Rules for drawing the various elements of technical drawing machine. Drawing dimensioning and descriptions of technical drawings. Draw connection of machines and equipment. Drawing złożeniowych drawings. Draw diagrams of the various fields of technology.</p>						

Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	60.0%	70.0%
	Exam	60.0%	30.0%
Recommended reading	Basic literature	<ol style="list-style-type: none"> 1. Tadeusz Dobrza ski: „Rysunek techniczny maszynowy” (wyd. 24), WNT Warszawa, 2005 2. J. Mazur, K. Kosi ski, K. Polakowski: „Grafika inzynierska z wykorzystaniem metod CAD”, Wydawnictwo Politechniki Warszawskiej 2006r. 3. Wojciech Gasparski: „Projektowanie”, PWN, Warszawa 1978 i nowsze. 	
	Supplementary literature	N/A	
	eResources addresses	PODSTAWY PROJEKTOWANIA I GRAFIKA INŻYNIERSKA - Moodle ID: 7730 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=7730	
Example issues/ example questions/ tasks being completed	Design process. Designer - silhouette, requirements. Basics of technical drawing. Executive and assembly drawings.		
Work placement	Not applicable		